#### AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

### Listing of Claims:

1. (Currently Amended) A compound having the formula (I):

$$R^7$$
  $R^6$   $R^8$   $R^4$   $R^7$   $R^6$   $R^5$   $R^4$   $R^2$   $R^2$   $R^4$   $R^2$   $R^2$   $R^4$   $R^2$   $R^2$   $R^3$ 

wherein:

X is NR<sup>9</sup>. O or S(O). (where t is 0 to 2):

V is CR30 or N

Z is CR31 or N:

 $R^{30}$  and  $R^{31}$  are each independently selected from the group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted eyeloalkyl, optionally substituted substituted eyeloalkylalkyl, optionally substituted heteroeyelyl, optionally substituted heteroeyelyl, optionally substituted heteroeyelylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl,  $-OR^{32}$ ,  $-SR^{32}$ ,  $-N(R^{33})R^{34}$ ,  $-N(R^{33})S(O)_2R^{23}$ ;  $-N(R^{35})N(R^{33})R^{34}$ ,  $-N(R^{35})N(R^{33})S(O)_2R^{23}$ ,  $-C(O)N(R^{35})N(R^{33})R^{34}$ ,  $-C(S)N(R^{35})N(R^{33})R^{34}$  and  $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$ , or

R<sup>30</sup> and R<sup>31</sup> together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, <u>or</u> optionally substituted cycloalkenyl ring; optionally substituted heterocyclyl ring.

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optionally substituted heteroaryl-ring, or optionally substituted aryl-with the exception of substituted or unsubstituted phenyl or substituted or unsubstituted naphthyl;

R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkyl, optionally substituted argle, optionally substituted argle, optionally substituted heterocyclyl, optionally substituted heteroargle, or optionally substituted heteroargle; or (b) R<sup>33</sup> and R<sup>34</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heteroargle ring, and R<sup>32</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) above,

 $R^{1} \ and \ R^{2} \ are each independently-\underline{is}, selected from a group consisting of halo; hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted eyeloalkyl, optionally substituted heteroaryly, optionally substituted aralkyl, optionally substituted heteroaralkyl, <math>-CR^{14}$ ,  $-SR^{14}$ ,  $-N(R^{15})R^{16}$ ,  $-N(R^{15})S(O)_2R^{23}$ ,  $-N(R^{17})N(R^{15})S(O)_2R^{23}$ ,  $-C(O)R^{18}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{15})R^{16}$ ,  $-C(O)RR^{15})R^{16}$ ,  $-C(O)RR^{15})R^{16}$ ,  $-C(O)RR^{15})R^{16}$ ,  $-C(O)RR^{17})N(R^{15})S(O)_2R^{23}$ ,  $-C(O)RR^{15}$ ,  $-C(O)RR^{15})R^{16}$ ,  $-C(O)RR^{17})N(R^{15})S(O)_2R^{23}$ ,  $-C(O)RR^{15})R^{16}$ ,  $-C(O)RR^{17})N(R^{15})S(O)_2R^{23}$ ,  $-C(O)RR^{15})R^{16}$ , and  $-C(O)RR^{17})N(R^{15})S(O)_2R^{23}$ ;

# R2 is hydrogen;

R<sup>3</sup> is hydrogen, optionally-substituted alkyl, optionally-substituted alkenyl, optionally-substituted alkynyl, optionally-substituted aryl, optionally-substituted aryl, optionally-substituted aryl, optionally-substituted heteroaryl, optionally-substituted heteroaryl, optionally-substituted heteroaryl, optionally-substituted heteroaralkyl, -C(O)R<sup>10</sup>, -C(O)OR<sup>10</sup>, -C(O)OR<sup>11</sup>, optionally-substituted heteroaralkyl, -C(O)R(R<sup>13</sup>)N(R<sup>11</sup>)R<sup>12</sup>, -C(O)N(R<sup>13</sup>)N(R<sup>11</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)N(R<sup>13</sup>)N(R<sup>11</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -N(R<sup>13</sup>)C(O)N(R<sup>13</sup>)C(O)N(R<sup>11</sup>)R<sup>12</sup>, -N(R<sup>13</sup>)C(O)N(R<sup>13</sup>)N(R<sup>11</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -N(R<sup>13</sup>)C(O)OR<sup>10</sup>, -P(O)OR<sup>10</sup>, or -P(O)(OR<sup>19</sup>)OR<sup>12</sup>; R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently selected from a group consisting of

R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, <u>or</u> optionally substituted alkynl; <u>or optionally substituted aryl, optionally substituted heteroaryl, optionally substituted eveloallyl, optionally substituted beteroevelyl, optionally</u>

substituted aralkyl, optionally substituted heteroaralkyl, OR<sup>14</sup>, SR<sup>14</sup>, S(O)<sub>d</sub>R<sup>14</sup>;

-N(R<sup>15</sup>)R<sup>16</sup>, N(R<sup>15</sup>)S(O)<sub>d</sub>R<sup>23</sup>, N(R<sup>15</sup>)C(O)R<sup>23</sup>, C(O)R<sup>23</sup>, C(O)R<sup>23</sup>, C(O)N(R<sup>24</sup>)R<sup>23</sup>;

-C(O)N(R<sup>24</sup>)S(O)<sub>d</sub>R<sup>23</sup>;

-C(O)N(R<sup>24</sup>)N(R<sup>24</sup>)N(R<sup>24</sup>)R(R<sup>23</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>)R(R<sup>24</sup>

 $R^6$  and  $R^7$  together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or  $R^6$  and  $R^7$ , together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and  $R^4$  and  $R^5$  are as described above: or

R<sup>4</sup> and R<sup>5</sup> together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R<sup>4</sup> and R<sup>5</sup>, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R<sup>5</sup> and R<sup>7</sup> are as described above; or

 $R^4$  and  $R^5$ , or  $R^4$  and  $R^6$ , or  $R^4$  and  $R^2$ , or  $R^5$  and  $R^6$ , or  $R^6$  and  $R^2$ ; together with the carbon atom to which they are attached, form an optionally substituted eyeloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted eyeloalkenyl ring or together form a double bond, and the others of  $R^4$ ,  $P^5$ ,  $R^6$  and  $R^2$  are as described above; or  $R^4$  and  $R^5$ , together with the carbon atom to which they are attached, and  $R^6$  and  $R^2$ , together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring or an optionally substituted cycloalkenyl ring;

 $R^9$  is hydrogen, <u>or</u> optionally substituted alkyl<del>,  $-C(O)R^{48}$ ,  $-C(O)OR^{20}$  or  $-S(O)\cdot R^{28}$ .</del>

 $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  are selected as in (a) or (b) as follows: (a)  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b)  $R^{11}$  and  $R^{12}$  or  $R^{12}$  and  $R^{19}$ , together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  are selected as in (a) above:

R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are selected as in (a) or (b) as follows: (a) R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are each independently hydrogen, optionally substituted alkyl, optionally

substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R<sup>15</sup> and R<sup>16</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and R<sup>18</sup>, R<sup>17</sup> and R<sup>18</sup> are selected as in (a) above;

 $R^{20}$ ,  $R^{21}$ ,  $R^{22}$  and  $R^{24}$  are selected as in (a) or (b) as follows: (a)  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$  and  $R^{24}$  are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted argle, optionally substituted argle, optionally substituted heteroeyelyl, optionally substituted heteroargle, or optionally substituted heteroargle, or (b)  $R^{24}$  and  $R^{22}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heteroargle ring, or an optionally substituted heteroargle ring, and  $R^{20}$  and  $R^{24}$  are selected as in (a) above;

R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

 $\begin{array}{l} {\rm cach\ of\ R^{4},R^{2},R^{2},R^{4},R^{5},R^{6},R^{7},R^{9},R^{10},R^{11},R^{12},R^{13},R^{14},R^{15},R^{16},R^{17},R^{18},}\\ R^{19},R^{20},R^{24},R^{22},R^{23},{\rm and\ R^{24}}.{\rm and\ R^{30}},R^{31},R^{32},R^{33},R^{34},R^{35}\,{\rm and\ R^{36}},{\rm when\ substituted},\\ {\rm are\ substituted\ with\ one\ or\ more\ substitutents,\ each\ independently\ selected\ from\ Q^{1};} \end{array}$ 

each Q<sup>1</sup> is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thioxyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR<sup>70</sup>, -SR<sup>70</sup>, -R<sup>60</sup>-C(J)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>70</sup>)C(J)R<sup>71</sup>, -OC(O)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>75</sup>)(R<sup>76</sup>), -P(R<sup>78</sup>)<sub>2</sub>, -P(O)(R<sup>78</sup>)<sub>2</sub>, -OP(O)(R<sup>78</sup>)<sub>2</sub>, -N(R<sup>70</sup>)S(O)<sub>2</sub>R<sup>71</sup>, -S(O)<sub>2</sub>R<sup>71</sup>, -S(O)<sub>2</sub>R<sup>83</sup>, -OS(O)<sub>2</sub>R<sup>83</sup> or -Si(R<sup>83</sup>)<sub>1</sub>;

two Q<sup>1</sup> groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

each  $Q^1$  is independently substituted or unsubstituted with one or more substituents each independently selected from  $Q^2$ ;

cach  $Q^2$  is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thioxyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl,  $-OR^{70}$ ,  $-SR^{70}$ ,  $-R^{60}$ - $C(J)R^{71}$ ,  $-R^{60}$ - $N(R^{70})C(J)R^{71}$ ,  $-OC(O)R^{71}$ ,  $-R^{60}$ - $N(R^{70})$ ,  $-P(R^{78})_2$ ,  $-P(O)(R^{78})_2$ ,  $-OP(O)(R^{78})_2$ ,  $-N(R^{70})S(O)_2R^{71}$ ,  $-S(O)_2R^{71}$ ,  $-S(O)_2R^{71}$ ,  $-S(O)_2R^{71}$ ,  $-S(O)_2R^{71}$ ,  $-S(O)_2R^{71}$ ,  $-OS(O)_2R^{71}$ ,

two Q<sup>2</sup> groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR<sup>70</sup>;

each R<sup>60</sup> is independently a direct bond or alkylene;

each R<sup>70</sup> is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R<sup>71</sup> is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl,

heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl,  $-OR^{72}$  or  $-N(R^{73})R^{74}$ ;

 $R^{72}, R^{73} \ and \ R^{74} \ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or$ 

R<sup>73</sup> and R<sup>74</sup>, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R<sup>75</sup> and R<sup>76</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

R<sup>75</sup> and R<sup>76</sup>, together with the nitrogen atom to which they are attached, form a heteroeyelyl ring or heteroaryl ring:

each R<sup>22</sup> is independently alkyl, alkenyl, eyeloalkyl, heteroeyelyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R78 is alkyl, heteroaryl, heterocyclyl, aryl, -OR79 or -N(R80)R81;

 $R^{79}$  is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl:

 $R^{80}$  and  $R^{81}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

 $R^{80}$  and  $R^{81}$ , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

 $R^{82}$  is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or -OR  $^{83};$  and

each  $\mathbb{R}^{83}$  is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

as a single isomer, a mixture of isomers, or as a racemic mixture of isomers; or as a pharmaceutically acceptable salt thereof.

2. (Currently Amended) A compound of claim 1, wherein:

$$R^{1} \text{ is } \underbrace{-C(\Theta)R^{14}, -C(\Theta)OR^{14}, -C(S)\ThetaR^{14}, -C(\Theta)SR^{14}, -C(C)N(R^{15})R^{16}; \\ -C(\Theta)N(R^{15})S(\Theta)_{a}R^{25}, -C(\Theta)N(R^{15})N=R^{16}, -C(\Theta)N(R^{17})N(R^{15})R^{16} \cdot \text{or } \\ -C(\Theta)N(R^{17})N(R^{15})S(\Theta)_{a}R^{25}.$$

- (Previously Presented) The compound of claim 2, wherein R<sup>3</sup> is -C(O)R<sup>10</sup>, -C(O)OR<sup>10</sup>,
  -S(O)<sub>2</sub>R<sup>10</sup> or -C(O)N(R<sup>11</sup>)R<sup>12</sup>.
- (Canceled)
- 5 (Currently Amended) The compound of Claim 4 wherein R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are selected from a), b), c), and d), e), f), g), h) and i) below:
  - a)  $$\rm R^4$  and  $\rm R^5$  are each independently hydrogen or halo and  $\rm R^6$  and  $\rm R^7$  are optionally substituted alkyl;
  - b)  ${
    m R}^6$  and  ${
    m R}^7$  are each independently hydrogen or halo and  ${
    m R}^4$  and  ${
    m R}^5$  are optionally substituted alkyl;
    - c) R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each optionally substituted alkyl; and

d) R4 and R5 are each independently hydrogen or halo and

R<sup>6</sup> and R<sup>2</sup>, together with the carbon to which they are attached, independently form an optionally substituted eveloalkyl or optionally substituted eveloalkyl or optionally substituted eveloalkyl or optionally substituted.

- e)  ${\rm R}^4$  and  ${\rm R}^5$  are optionally substituted alkyl and  ${\rm R}^6$  and  ${\rm R}^7$ , together with the carbon to which they are attached, independently form an optionally substituted eveloalkyl or optionally substituted eveloalkenyl ring
- f)  $R^4$  and  $R^5$ , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl-ring and  $R^6$  and  $R^3$  are each independently hydrogen or halo:
- g)—R<sup>4</sup> and R<sup>5</sup>, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring and R<sup>6</sup> and R<sup>2</sup> are optionally substituted alkyl;
- h)  $R^4$  and  $R^5$ , together with the curbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring and  $R^6$  and  $R^2$ , together with the curbon to which they are attached, independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkyl ring; and
  - id) R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or halo.
- (Canceled)
- (Currently Amended) A compound of claim 6-5 having the formula (II):

$$R^{7}$$
  $R^{6}$   $R^{5}$   $R^{4}$   $R^{30}$   $R^{9}$   $R^{1}$   $R^{2}$  (II)

or a pharmaceutically acceptable salt thereof, wherein:

$$\begin{split} R^1 \ is \ -C(O) N R^{14}, -C(S) O R^{14}, -C(O) S R^{14}, -C(O) N (R^{15}) R^{16}, -C(O) N (R^{15}) S (O)_2 R^{22}, \\ -C(O) N (R^{15}) N = R^{16}, -C(O) N (R^{17}) N (R^{15}) R^{16} \ and -C(O) N (R^{17}) N (R^{15}) S (O)_2 R^{23}, \end{split}$$

R2 is hydrogen, halo or optionally substituted alkyl;

R3 is -C(O)R10:

R4 and R5 are each independently hydrogen or halo; or

R4 and R5 are each optionally substituted alkyl;

R6 and R7 are each independently hydrogen or halo; or

R<sup>6</sup> and R<sup>7</sup> are each optionally substituted alkyl; or

 $R^6$  and  $R^2$  together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring or an optionally substituted cycloalkyl ring;

 $R^9$  is hydrogen, or optionally substituted alkyl,  $-C(O)R^{48}$ , or  $-S(O)_2R^{22}$ ;

R<sup>10</sup> is an optionally substituted aryl or an optionally substituted heteroaryl;

R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

 $R^{30}$  is halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted eycloalkyl, optionally substituted cycloalkyl, optionally substituted eycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted aralkyl, optional

8. (Currently Amended) The compound of Claim 7 wherein:

R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or halo; and
R<sup>30</sup> is selected from the group consisting of hydrogen, halo, -C(O)R<sup>36</sup>,
-C(O)OR<sup>32</sup>, -C(S)OR<sup>32</sup>, -C(O)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)R<sup>34</sup>,
-C(O)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(S)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup>,
-C(S)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup> and -C(O)N(R<sup>35</sup>)N(R<sup>33</sup>)K(O)R<sup>23</sup>:

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted earlyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted

where  $R^{12}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$  and  $R^{36}$  are selected as in (a) or (b) as follows: (a)  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$  and  $R^{36}$  are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted argulary, optionally substituted argulary, optionally substituted argulary, optionally substituted heteroaryl, or optionally substituted heteroaryl, or (b)  $R^{33}$  and  $R^{34}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heteroaryl ring, and the others of  $R^{32}$ ,  $R^{24}$ - $R^{24}$ - $R^{35}$  and  $R^{36}$  are selected as in (a) above.

- 9. (Original) The compound of Claim 8 wherein said compound is
  - $\label{eq:condition} 6\hbox{-}(4\hbox{-fluoro-benzoyl})\hbox{-}3,6,7,8\hbox{-tetrahydro-imidazo} \cite{24,5-d}\ azepine-4\hbox{-carboxylic acid}$  ethyl ester.
- (Currently Amended) The compound of Claim 7 wherein:

R4 and R5 are each independently hydrogen or halo; and

 $\ensuremath{\mbox{R}^6}$  and  $\ensuremath{\mbox{R}^7}$  are optionally substituted alkyl; or

R<sup>6</sup> and R<sup>7</sup>, together with the carbon to which they are attached, independently form an ontionally substituted eveloalkyl rine.

11. (Currently Amended) The compound of Claim 10 wherein

 $R^2$ -is hydrogen, halo or optionally substituted alkyl; and  $R^9$  is hydrogen.

(Currently Amended) The compound of Claim 11 wherein R<sup>30</sup> is selected from the group consisting of -C(O)R<sup>36</sup>, -C(O)OR<sup>32</sup>, -C(S)OR<sup>32</sup>, -C(O)SR<sup>32</sup>, -C(O)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)R<sup>34</sup>, -C(O)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(S)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)R<sup>34</sup> and -C(O)N(R<sup>35</sup>)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>;

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heterocyclyl, optionally substituted heterocyclyl, optionally substituted heterocyclyl, or optionally substituted heterocyclyl, or optionally substituted heterocyclyl, or optionally substituted heterocyclyl, or optionally substituted heterocyclyl, optionally substituted heterocyclyl, or optionally substituted heterocyclyl, optionally su

where R<sup>22</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R<sup>33</sup> and R<sup>34</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R<sup>32</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) above.

- (Previously Presented) The compound of Claim 12 wherein R<sup>1</sup> is -C(O)OCH<sub>2</sub>CH<sub>3</sub>,
   -C(O)OCH<sub>3</sub>, -C(O)OCH (CH<sub>3</sub>)<sub>2</sub>, -C(O)OH, -C(O)OCH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>3</sub>,
   -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH (CH<sub>3</sub>)<sub>2</sub>, -C(O)NH(cyclopropyl), -C(O)NHCH(CH<sub>2</sub>)(CH<sub>2</sub>CH<sub>3</sub>) or -C(O)N(CH<sub>3</sub>)(cyclopropyl).
- 14. (Currently Amended) The compound of Claim 6-5 wherein:

Z is CR31; and

R<sup>31</sup> is independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, -OR<sup>32</sup>, -SR<sup>32</sup>, -N(R<sup>33</sup>)R<sup>34</sup>, -N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>; -N(R<sup>35</sup>)N(R<sup>33</sup>)S<sup>34</sup>, -N(R<sup>35</sup>)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)R<sup>36</sup>, -C(O)R<sup>36</sup>, -C(O)R<sup>32</sup>, -C(O)SR<sup>32</sup>, -C(O)SR<sup>32</sup>, -C(O)R<sup>33</sup>, R<sup>34</sup>, -N(R<sup>35</sup>)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)R<sup>33</sup>, -C(O)R<sup>36</sup>, -C(O)R<sup>3</sup>

 $-C(S)N(R^{13})R^{14}$ ,  $-C(O)N(R^{13})S(O)_2R^{23}$ ,  $-C(S)N(R^{33})S(O)_2R^{23}$ ,  $-C(O)N(R^{15})N(R^{33})R^{34}$ ,  $-C(S)N(R^{15})N(R^{13})R^{14}$  and  $-C(O)N(R^{15})N(R^{33})R^{14}$  since  $-C(O)N(R^{15})N(R^{15})R^{14}$  and  $-C(O)N(R^{15})N(R^{15})R^{15}$ .

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted eycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heter

where R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted heteroaryl, or optionally substituted heteroarylkyl; or (b) R<sup>33</sup> and R<sup>34</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R<sup>32</sup>, R<sup>24</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) above.

15. (Currently Amended) The compound of Claim 14 wherein:

Z is CR31; and

 $R^{31}$  is independently selected from a group consisting of optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, optionally substituted heterocyclyl,  $-C(O)R^{36}$ ,  $-C(O)OR^{32}$ ,  $-C(S)OR^{32}$ ,  $-C(O)NR^{33}$ ,  $-C(O)N(R^{33})R^{34}$ ,  $-C(S)N(R^{33})R^{34}$ ,  $-C(O)N(R^{33})R^{30}$ 

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted early, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted he

where R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>22</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkyl, optionally substituted are cycloalkyl, optionally substituted are l. optionally substituted are lakyl.

substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b)  $R^{33}$  and  $R^{34}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of  $R^{32}$ ,  $R^{33}$ - $R^{34}$ - $R^{35}$  and  $R^{36}$  are selected as in (a) above.

- (Currently Amended) The compound of Claim 14 wherein X is O-or-S(O)<sub>r</sub> (where t is 0 to 2).
- (Currently Amended) The compound of Claim 16 wherein R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or halo; and

$$\begin{split} R^{30} \text{ is selected from the group consisting of hydrogen, halo, -C(O)R}^{36},\\ -C(O)OR^{32}, -C(S)OR^{32}, -C(O)SR^{32}, -C(O)N(R^{33})R^{34}, -C(S)N(R^{33})R^{34},\\ -C(O)N(R^{33})S(O)_2R^{23}, -C(S)N(R^{33})S(O)_2R^{22}, -C(O)N(R^{35})N(R^{33})R^{34},\\ -C(S)N(R^{35})N(R^{33})R^{34} \text{ and -C(O)N(R}^{35})N(R^{33})S(O)_2R^{23}; \end{split}$$

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R<sup>12</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R<sup>33</sup> and R<sup>34</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R<sup>12</sup>, R<sup>33</sup>-R<sup>24</sup>-R<sup>35</sup> and R<sup>36</sup> are selected as in (a) above.

- (Original) The compound of Claim 17 wherein said compound is 6-(3,4-difluoro-benzoyl)-5,6-dihydro-4H-thieno[2,3-d] azepine-8-carboxylic acid ethyl exter.
- (Currently Amended) The compound of Claim 16 wherein:
   R<sup>4</sup> and R<sup>5</sup> are each independently hydrogen or halo; and

R6 and R7 are optionally substituted alkyl: or

R<sup>6</sup> and R<sup>2</sup>, together with the carbon to which they are attached, independently form an ontionally substituted eveloalkyl rine.

- (Currently Amended) The compound of Claim 19 wherein:
  - $\mathbb{R}^2$  is hydrogen, halo or optionally substituted alkyl; and  $\mathbb{R}^9$  is hydrogen.
- (Currently Amended) The compound of Claim 20 wherein R<sup>30</sup> is selected from the group consisting of -C(O)R<sup>36</sup>, -C(O)OR<sup>32</sup>, -C(S)OR<sup>32</sup>, -C(O)SR<sup>32</sup>, -C(O)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(S)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted exploalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substit

where R<sup>12</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroarylkyl; or (b) R<sup>33</sup> and R<sup>34</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of R<sup>32</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) above.

- 22. (Previously Presented) The compound of Claim 21 wherein R<sup>1</sup> is -C(O)OCH<sub>2</sub>CH<sub>3</sub>, -C(O)OCH<sub>3</sub>, -C(O)OCH<sub>3</sub>, -C(O)OCH<sub>2</sub>CH<sub>3</sub>, -C(O)OCH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>3</sub>CH<sub>3</sub>) or -C(O)NHCH<sub>2</sub>CH<sub>3</sub>(cyclopropyl); and
  - $R^3$  is  $-C(O)R^{10}$  wherein  $R^{10}$  is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.
- 23. (Previously Presented) The compound of Claim 22 wherein said compound is

 $\label{eq:carboxylic} 6-(3,4-diffluoro-benzoyl)-4,4-dimethyl-5,6-dihydro-4H-thieno[2,3-d] azepine-8-carboxylic acid ethyl ester .$ 

24. (Currently Amended) The compound of Claim 14 wherein

X is NR9:

 $R^9$  is hydrogen, or optionally substituted alkyl,  $-C(\Theta)R^{18}$  or  $-S(\Theta)_2R^{24}$ ; and  $R^{18}$  and  $R^{23}$  each independently optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl.

(Currently Amended) The compound of Claim 24 wherein:

R4 and R5 are each independently hydrogen or halo; and

R<sup>6</sup> and R<sup>7</sup> are optionally substituted alkyl; or

R<sup>6</sup> and R<sup>2</sup>, together with the carbon to which they are attached, independently form an ontionally substituted eveloalkyl rine.

26. (Currently Amended) The compound of Claim 25 wherein:

R<sup>2</sup> is hydrogen, halo or optionally substituted alkyl; and R<sup>9</sup> is hydrogen.

(Currently Amended) The compound of Claim 26 wherein R<sup>30</sup> is selected from the group consisting of -C(O)R<sup>36</sup>, -C(O)OR<sup>32</sup>, -C(S)OR<sup>32</sup>, -C(O)SR<sup>32</sup>, -C(O)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(S)N(R<sup>33</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup> and -C(O)N(R<sup>35</sup>)N(R<sup>35</sup>)N(R<sup>35</sup>)N(D)R<sup>23</sup>.

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted eycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; and

where R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substitute

substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b)  $R^{33}$  and  $R^{34}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$  and  $R^{36}$  are selected as in (a) above.

- 28. (Previously Presented) The compound of Claim 27 wherein R¹ is -C(O)OCH<sub>2</sub>CH<sub>3</sub>, -C(O)OCH<sub>3</sub>, -C(O)OCH<sub>3</sub>, -C(O)OCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>3</sub>, -C(O)NHCH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>2</sub>CH<sub>3</sub>) or -C(O)NHCH<sub>3</sub>)(cyclopropyl); and
  - $R^3 \ is \ -C(O)R^{10} \ wherein \ R^{10} \ is \ optionally \ substituted \ aryl, \ optionally \ substituted \ heteroaryl, \ optionally \ substituted \ alkyl \ or \ optionally \ substituted \ aralkyl.$
- (Original) The compound of Claim 28 wherein said compound is selected from the group consisting of:
  - 6-(3,4-difluoro-benzoyl)-4,4-dimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid diethyl ester; and
  - 6-(3,4-difluoro-benzoyl)-4,4-dimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid 2-ethyl ester 8-isopropyl ester.
- 30. (Currently Amended) The compound of Claim 29-26 wherein:

-C(S)N(R35)N(R33)R34 and -C(O)N(R35)N(R33)S(O)R23;

R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or halo; and
R<sup>30</sup> is selected from the group consisting of hydrogen, halo, -C(O)R<sup>36</sup>,
-C(O)OR<sup>32</sup>, -C(S)OR<sup>32</sup>, -C(O)SR<sup>32</sup>, -C(O)N(R<sup>33</sup>)R<sup>34</sup>, -C(S)N(R<sup>33</sup>)R<sup>34</sup>,
-C(O)N(R<sup>35</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(S)N(R<sup>35</sup>)S(O)<sub>2</sub>R<sup>23</sup>, -C(O)N(R<sup>35</sup>)N(R<sup>33</sup>)R<sup>34</sup>,

where R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted eycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substit

where R<sup>32</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are selected as in (a) or (b) as follows: (a) R<sup>22</sup>, R<sup>33</sup>, R<sup>34</sup>, R<sup>35</sup> and R<sup>36</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted

cycloalkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b)  $\mathbb{R}^{33}$  and  $\mathbb{R}^{34}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroaryl ring, and the others of  $\mathbb{R}^{32}$ ,  $\mathbb{R}^{24}$ ,  $\mathbb{R}^{25}$  and  $\mathbb{R}^{36}$  are selected as in (a) above.

- (Currently Amended) The compound of Claim 30-1 wherein said compound is 6-(3,4-difluoro-benzoyl)-1,4,4-trimethyl-1,4,5,6-tetrahydro-pyrrolo[2,3-d]azepine-2,8-dicarboxylic acid 2-ethyl ester 8-isopropyl ester.
- 32. (Currently Amended) The compound of Claim 5 wherein:

Y is CR30:

Z is CR31; and

R<sup>30</sup> and R<sup>31</sup> together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, <u>or</u> optionally substituted cycloalkenyl ring, <u>or</u> optionally substituted heterocyclyl ring, optionally substituted heterocyclyl ring, optionally substituted heterocyclyl ring optionally substituted aryl ring with the exception of substituted or unsubstituted phenyl and substituted or unsubstituted naphthyl.

- (Original) The compound of claim 32 wherein said optionally substituted cycloalkyl ring
  is optionally substituted cyclopentyl, optionally substituted cyclohexyl, optionally
  substituted cycloheptyl or optionally substituted cyclooctyl.
- 34. (Currently Amended) A compound having the formula (V):

$$(Q^{1})_{\bigcap}$$

$$R^{6} \qquad R^{7} \qquad R^{4} \qquad R^{5}$$

$$N \longrightarrow R^{3} \qquad R^{2} \qquad (V)$$

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or a pharmaceutically acceptable salt thereof, wherein:

n is 0 to 8:

 $R^{1} \ and \ R^{2} \ are \ each \underline{is} \ independently selected from a group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted eyeloalkyl, optionally substituted heteroaryl, optionally substituted aralkyl, optionally substituted heteroaralkyl, <math>-OR^{14}$ ,  $-SR^{14}$ ,  $-N(R^{15})R^{16}$ ,  $-N(R^{15})R^{16}$ ,  $-N(R^{15})S(O)_2R^{23}$ ,  $-N(R^{17})N(R^{15})S(O)_2R^{23}$ ,  $-C(O)R^{18}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{14}$ ,  $-C(O)RR^{15}$ ,  $-C(O)RR^{1$ 

## R2 is hydrogen;

 $R^3 is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted eryl, optionally substituted aryl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted hete$ 

R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, <u>or</u> optionally substituted alkyl, <u>or</u> optionally substituted alkyl, <u>or</u> optionally substituted heteroaryl, optionally substituted everyl, optionally substituted heteroaryl, optionally substituted aralkyl, optionally substituted heteroaralkyl, OR<sup>14</sup>, SR<sup>14</sup>, S(O)<sub>2</sub>R<sup>24</sup>; -N(R<sup>15</sup>)S(O)<sub>2</sub>R<sup>23</sup>, N(R<sup>15</sup>)C(O)R<sup>23</sup>, C(O)R<sup>18</sup>, C(O)OR<sup>26</sup>, C(O)N(R<sup>21</sup>)R<sup>22</sup>; -C(O)N(R<sup>24</sup>)S(O)<sub>2</sub>R<sup>23</sup>; -C(O)N(R<sup>24</sup>)N(R<sup>24</sup>)N(R<sup>24</sup>)R<sup>22</sup> and C(O)N(R<sup>24</sup>)N(R<sup>21</sup>)S(O)<sub>2</sub>R<sup>23</sup>; or R<sup>2</sup> and R<sup>2</sup>, or R<sup>2</sup>, and R<sup>2</sup>, or R<sup>2</sup>

together with the carbon atom to which they are attached, form an optionally substituted eyeloalkyl-ring, optionally substituted heterocyclyl-ring, an optionally substituted eyeloalkenyl-ring or together form a double bond, and the others of  $\mathbb{R}^4$ ,  $\mathbb{R}^5$ ,  $\mathbb{R}^6$  and  $\mathbb{R}^7$  are as described above; or  $\mathbb{R}^6$  and  $\mathbb{R}^7$  together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or  $\mathbb{R}^6$  and  $\mathbb{R}^7$ ,

together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and R<sup>4</sup>-and R<sup>5</sup> are as described above;

 $R^9$  is hydrogen, or optionally substituted alkyl,  $-C(\Theta)R^{48}$  or  $-S(\Theta)_2R^{23}$ ;  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  are selected as in (a) or (b) as follows: (a)  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted argul, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroargl, or optionally substituted heteroarglkyl; or (b)  $R^{11}$  and  $R^{12}$  or  $R^{12}$  and  $R^{19}$ , together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  are selected as in (a), above;

 $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  and  $R^{18}$  are selected as in (a) or (b) as follows: (a)  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$  and  $R^{18}$  are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkyl, optionally substituted argle, optionally substituted argle, optionally substituted heterocyclyl, optionally substituted heteroargle, or optionally substituted heteroargle; or (b)  $R^{15}$  and  $R^{16}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heteroargle ring, and  $R^{14}$ ,  $R^{17}$  and  $R^{18}$  are selected as in (a) above;

R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup> and R<sup>24</sup> are selected as in (a) or (b) as follows: (a) R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup> and R<sup>24</sup> are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted arguments are substituted arguments. One of the property of th

R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl:

each of  $R^4$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^9$ ,  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ , and  $R^{19}$ ,  $R^{20}$ ,  $R^{22}$ ,  $R^{22}$ , and  $R^{24}$ , when substituted, are substituted with one or more substituents, each independently selected from  $Q^1$ ;

cach Q<sup>1</sup> is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thioxyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR<sup>70</sup>, -SR<sup>70</sup>, -R<sup>60</sup>-C(J)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>70</sup>)C(J)R<sup>71</sup>, -OC(O)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>75</sup>)(R<sup>76</sup>), -P(R<sup>78</sup>)<sub>2</sub>, -P(O)(R<sup>78</sup>)<sub>2</sub>, -OP(O)(R<sup>78</sup>)<sub>2</sub>, -N(R<sup>70</sup>)S(O)<sub>2</sub>R<sup>71</sup>, -S(O)<sub>2</sub>R<sup>71</sup>, -S(O)R<sup>82</sup>, -OS(O)R<sup>83</sup>, -OS(O)<sub>2</sub>R<sup>83</sup> or -Si(R<sup>83</sup>)<sub>3</sub>;

two Q<sup>1</sup> groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring; or

 $each\ Q^{1}\ is\ independently\ substituted\ or\ unsubstituted\ with\ one\ or\ more\ substitutents\ each\ independently\ selected\ from\ Q^{2};$ 

each Q<sup>2</sup> is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thioxyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR<sup>70</sup>, -SR<sup>70</sup>, -R<sup>60</sup>-C(J)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>70</sup>)C(J)R<sup>71</sup>, -OC(O)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>75</sup>)(R<sup>76</sup>), -P(R<sup>78</sup>)<sub>2</sub>, -P(O)(R<sup>78</sup>)<sub>2</sub>, -OP(O)(R<sup>78</sup>)<sub>2</sub>, -N(R<sup>70</sup>)S(O)<sub>2</sub>R<sup>71</sup>, -S(O)<sub>2</sub>R<sup>83</sup>, -OS(O)<sub>8</sub>R<sup>83</sup> or -Si(R<sup>83</sup>)<sub>1</sub>;

two Q<sup>2</sup> groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR<sup>70</sup>;
each R<sup>60</sup> is independently a direct bond or alkylene;
each R<sup>70</sup> is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl,
heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R<sup>71</sup> is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, -OR<sup>72</sup> or -N(R<sup>73</sup>)R<sup>74</sup>.

 $R^{72}$ ,  $R^{73}$  and  $R^{74}$  are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R<sup>73</sup> and R<sup>74</sup>, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R<sup>75</sup> and R<sup>76</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

 $R^{75}$  and  $R^{76}$ , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

 ${\it each} \ R^{27} is independently alkyl, alkenyl, eyeloalkyl, heteroeyelyl, aryl, heteroaryl, aralkyl or heteroaralkyl;$ 

R78 is alkyl, heteroaryl, heterocyclyl, aryl, -OR79 or -N(R80)R81;

 $R^{79}$  is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl:

 $R^{80} \ and \ R^{81} \ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or$ 

 $R^{80}$  and  $R^{81},$  together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

 $R^{82}$  is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or -OR  $^{83}$  ; and

each  $\mathbb{R}^{83}$  is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl.

35. (Original) The compound of Claim 34 wherein:

 $R^{3}$  is  $-C(O)R^{10}$ ;

wherein R<sup>10</sup> is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl.

36. (Original) The compound of Claim 35 wherein:

- $R^1$  is  $-C(O)R^{18}$ ,  $-C(O)OR^{14}$  or  $-C(O)N(R^{15})R^{16}$ , where  $R^{14}$  and  $R^{15}$  are optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted heterocyclyl,  $R^{16}$  is hydrogen, and  $R^{18}$  is optionally substituted alkyl.
- (Canceled)
- 38. (Currently Amended) The compound of Claim 37 wherein:
  - R<sup>2</sup> is hydrogen, halo or optionally substituted alkyl; and R<sup>9</sup> is hydrogen or optionally substituted alkyl.
- (Currently Amended) The compound of Claim 38 wherein R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are selected from a), b), c), and d), e), f), g) and h) below:
  - a)  $R^4$  and  $R^5$  are each independently hydrogen or halo and  $R^6$  and  $R^7$  are optionally substituted alkyl;
  - b)  ${
    m R}^6$  and  ${
    m R}^7$  are each independently hydrogen or halo and  ${
    m R}^4$  and  ${
    m R}^5$  are optionally substituted alkyl;
    - c) R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each optionally substituted alkyl; and
    - d) R<sup>4</sup> and R<sup>5</sup> are each independently hydrogen or halo and
  - R<sup>6</sup>-and R<sup>2</sup>, together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl ring.
  - e)  $R^4$ -and  $R^5$ -are optionally substituted alkyl and  $R^6$ -and  $R^2$ , together with the carbon to which they are attached, independently form an optionally substituted eyeloalkyl or optionally substituted eyeloalkenyl-ring
  - f)  $R^4$  and  $R^5$ , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl or optionally substituted cycloalkenyl-ring and  $R^6$ -and  $R^2$ -are each independently hydrogen or halo;
  - g)—R<sup>4</sup> and R<sup>5</sup>, together with the carbon to which they are attached, independently form an optionally substituted eveloalkenyl rine and R<sup>6</sup> and R<sup>7</sup> are optionally substituted alkely.
  - h)  $R^4$  and  $R^5$ , together with the carbon to which they are attached, independently form an optionally substituted cycloalkyl-ring or optionally substituted cycloalkenyl-ring and  $R^6$  and  $R^7$ , together with the carbon to which they are attached.

independently form an optionally substituted cycloalkyl ring or optionally substituted cycloalkenyl ring; and

- id) R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or halo.
- 40. (Currently Amended) The compound of Claim 39 wherein:
  - R4 and R5 are each independently hydrogen or halo; and
  - R6 and R7 are optionally substituted alkyl; or
  - R<sup>6</sup> and R<sup>2</sup>, together with the earbon to which they are attached, independently form an ontionally substituted eveloalkyl rine.
- (Canceled)
- (Currently Amended) The compound of Claim 34 wherein R¹ is -C(O)OCH<sub>2</sub>CH<sub>3</sub>,
   -C(O)OCH<sub>3</sub>, -C(O)OCH(CH<sub>3</sub>)<sub>2</sub>, -C(O)OH, -C(O)OCH<sub>2</sub>CH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH<sub>3</sub>,
   -C(O)NHCH<sub>2</sub>CH<sub>3</sub>, -C(O)NHCH (CH<sub>3</sub>)<sub>2</sub>, -C(O)NH(cyclopropyl), -C(O)NH(cyclopentyl),
  - -C(O)NHCH(CH3)(CH2CH3) or -C(O)N(CH3)(cyclopropyl);

R2 is hydrogen, halo or optionally substituted alkyl;

R<sup>3</sup> is -C(O)R<sup>10</sup> wherein R<sup>10</sup> is optionally substituted aryl, optionally substituted heteroaryl, optionally substituted alkyl or optionally substituted aralkyl;

R4 and R5 are each independently hydrogen or halo; and

R<sup>6</sup> and R<sup>7</sup> are optionally substituted alkyl; or

R<sup>6</sup> and R<sup>7</sup>, together with the carbon to which they are attached, independently form an optionally substituted eveloalkyl rine:

R9 is hydrogen.

- 43. (Original) The compound of Claim 42 wherein said compound is
  - 3-(4-fluoro-benzoyl)-1,1-dimethyl-1,2,3,6,7,8,9,10-octahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester.
- (Original) The compound of Claim 39 wherein R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently hydrogen or halo.
- 45. (Previously Presented) The compound of Claim 44 wherein said compound is

3-(4-fluoro-benzoyl)-1,2,3,6,7,8,9,10-octahydro-azepino[4,5-b]indole-5-carboxylic acid ethyl ester.

 (Currently amended) A pharmaceutical composition comprising a pharmaceutical carrier or vehicle and a compound having the formula (I):

wherein:

X is NR<sup>9</sup>, O or S(O), (where t is 0 to 2);

Y is CR30 or N:

Z is CR31 or N;

 $R^{30}$  and  $R^{31}$  are each independently selected from the group consisting of halo, hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted eyeloalkyl, optionally substituted substituted eyeloalkylalkyl, optionally substituted heteroeyelyl, optionally substituted heteroeyelylalkyl, optionally substituted aralkyl, optionally substituted heteroaralkyl,  $-OR^{32}$ ,  $-SR^{32}$ ,  $-N(R^{33})R^{34}$ ,  $-N(R^{33})S(O)_2R^{23}$ ;  $-N(R^{35})N(R^{33})R^{34}$ ,  $-N(R^{35})N(R^{33})S(O)_2R^{23}$ ,  $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$ ,  $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$ ,  $-C(O)N(R^{35})N(R^{33})S(O)_2R^{23}$ ,  $-C(O)N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35})N(R^{35}$ 

R<sup>30</sup> and R<sup>31</sup> together with the carbon atoms to which they are attached, form an optionally substituted cycloalkyl ring, <u>or</u> optionally substituted cycloalkenyl ring, optionally substituted heteroeyelyl ring, optionally substituted heteroeyelyl ring, optionally substituted aryl with the exception of substituted or unsubstituted phenyl or substituted or unsubstituted naphthyl;

 $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$  and  $R^{36}$  are selected as in (a) or (b) as follows: (a)  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$  and  $R^{36}$  are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted argularyl, optionally substituted eyeloalkyl, optionally substituted argularyl, optionally substituted heterocyclyl, optionally substituted heteroargl, or optionally substituted heteroarglkyl; or (b)  $R^{33}$  and  $R^{34}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heterocyclyl ring, or an optionally substituted heteroargl ring, and  $R^{32}$ ,  $R^{35}$  and  $R^{36}$  are selected as in (a) above,

 $R^1$  and  $R^2$  are each independently-is selected from a group consisting of hale, hydrogen, optionally-substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted heteroaryl, optionally substituted heteroaryl, optionally substituted eyeloalkyl, optionally substituted heteroaryly, optionally substituted aralkyl, optionally substituted heteroaralkyl,  $-0R^{14}$ ,  $-SR^{14}$ ,  $-N(R^{15})R^{16}$ ,  $-N(R^{15})S(O)_2R^{23}$ ,  $-N(R^{17})N(R^{15})R^{16}$ ,  $-N(R^{15})S(O)_2R^{23}$ ,  $-C(O)R^{18}$ ,  $-C(O)R^{14}$ ,  $-C(O)R^{14}$ ,  $-C(O)R^{14}$ ,  $-C(O)R^{14}$ ,  $-C(O)R^{15})R^{16}$ ,  $-C(O)N(R^{15})S(O)_2R^{23}$ ,  $-C(O)N(R^{15})N^{16}$ ,  $-C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$ ,  $-C(O)N(R^{15})N^{16}$  and  $-C(O)N(R^{17})N(R^{15})S(O)_2R^{23}$ ;

# R2 is hydrogen;

 $R^3 is \ hydrogen, \ optionally \ substituted \ alkyl, optionally \ substituted \ alkenyl, optionally \ substituted \ alkyl, optionally \ substituted \ aryl, optionally \ substituted \ aryl, optionally \ substituted \ heteroaryl, optionally \ substit$ 

R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are each independently selected from a group consisting of hydrogen, halo, optionally substituted alkyl, optionally substituted alkenyl, <u>or</u> optionally substituted alkynyl; optionally substituted aryl, optionally substituted heteroaryl, optionally substituted eyeloalkyl, optionally substituted heteroaryl, optionally substituted aralkyl, optionally substituted heteroaralkyl, OR<sup>14</sup>, -SR<sup>14</sup>, -S(O); R<sup>14</sup>;

 $-N(R^{15})R^{16}, -N(R^{15})S(O)_{12}R^{23}, -N(R^{15})C(O)R^{23}, -C(O)N^{18}, -C(O)OR^{20}, -C(O)N(R^{21})R^{23}, -C(O)N(R^{21})S(O)_{12}R^{22}; or$   $-C(O)N(R^{21})S(O)_{12}R^{22}; -C(O)N(R^{21})N(R^{21})R^{22}; and -C(O)N(R^{21})N(R^{21})S(O)_{12}R^{22}; or$ 

 $R^6$ -and  $R^7$ -together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or  $R^6$ -and  $R^7$ , together with the carbon atom to which they are attached, form an optionally substituted exocyclic double bond, and  $R^4$ -and  $R^5$ -are as described above; or

R<sup>4</sup> and R<sup>5</sup> together form an oxo, thioxo, optionally substituted imino, optionally substituted oxime or an optionally substituted hydrazone, or R<sup>4</sup> and R<sup>5</sup>, together with the carbon atom to which they are attached, form an optionally substituted exocyclic double hand, and R<sup>5</sup> and R<sup>7</sup> are as described above: or

 $R^4$ -and  $R^5$ , or  $R^4$ -and  $R^6$ , or  $R^4$ -and  $R^2$ , or  $R^5$ -and  $R^6$ , or  $R^5$ -and  $R^7$ , or  $R^6$ -and  $R^7$ , together with the carbon atom to which they are attached, form an optionally substituted eyeloalkyl ring, optionally substituted heterocyclyl ring, an optionally substituted eyeloalkenyl ring or together form a double bond, and the others of  $R^4$ ,  $R^5$ ,  $R^6$ -and  $R^7$  are as described above; or  $R^4$  and  $R^5$ , together with the carbon atom to which they are attached, and  $R^6$ -and  $R^7$ -together with the carbon atom to which they are attached, form an optionally substituted cycloalkyl ring, optionally substituted heterocyclyl ring or an optionally substituted cycloalkenyl ring;

 $R^9$  is hydrogen, <u>or</u> optionally substituted alkyl<del>,  $C(O)R^{18}$ ,  $C(O)R^{20}$  or  $-S(O)R^{23}$ :</del>

 $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  are selected as in (a) or (b) as follows: (a)  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b)  $R^{11}$  and  $R^{12}$  or  $R^{12}$  and  $R^{19}$ , together with the atoms to which they are attached, form an optionally substituted heterocyclyl ring or an optionally substituted heteroaryl ring; and the others of  $R^{10}$ ,  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{19}$  are selected as in (a), above;

R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are selected as in (a) or (b) as follows: (a) R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> and R<sup>18</sup> are each independently hydrogen, optionally substituted alkenyl, optio

optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b) R<sup>15</sup> and R<sup>16</sup>, together with the nitrogen atom to which they are attached, form an optionally substituted heteroaryl ring, and R<sup>14</sup>, R<sup>17</sup> and R<sup>18</sup> are selected as in (a) above:

 $R^{2a}$ ,  $R^{2a}$ ,  $R^{2a}$  and  $R^{24}$  are selected as in (a) or (b) as follows: (a)  $R^{2a}$ ,  $R^{2a}$ ,  $R^{2a}$  and  $R^{24}$  are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted earyl, optionally substituted heteroeyelyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or (b)  $R^{2a}$  and  $R^{2a}$ , together with the nitrogen atom to which they are attached, form an optionally substituted heteroaryl ring, and  $R^{2a}$  are selected as in (a) above:

R<sup>23</sup> is optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heterocyclyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

 $\begin{array}{l} {\rm each\ of\ R^4,R^2,R^2,R^4,R^5,R^6,R^7,R^9,R^{10},R^{11},R^{12},R^{13},R^{14},R^{15},R^{16},R^{17},R^{18},} \\ {\rm R^{19},R^{20},R^{21},R^{22},R^{23},and\ R^{24}} {\rm -and\ R^{30},R^{11},R^{12},R^{33},R^{34},R^{35}} {\rm and\ R^{36}, when substituted,} \\ {\rm are\ substituted\ with\ one\ or\ more\ substitutents,\ each\ independently\ selected\ from\ Q^1;} \end{array}$ 

each Q<sup>1</sup> is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thioxyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR<sup>70</sup>, -SR<sup>70</sup>, -R<sup>60</sup>-C(J)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>70</sup>)C(J)R<sup>71</sup>, -OC(O)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>75</sup>)(R<sup>76</sup>), -P(R<sup>78</sup>)<sub>2</sub>, -P(O)(R<sup>78</sup>)<sub>2</sub>, -OP(O)(R<sup>78</sup>)<sub>2</sub>, -N(R<sup>70</sup>)S(O)<sub>2</sub>R<sup>71</sup>, -S(O)R<sup>82</sup>, -OS(O)<sub>2</sub>R<sup>83</sup>, or -Si(R<sup>83</sup>)<sub>1</sub>:

two Q<sup>1</sup> groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cyc<u>iiii</u>loalkynyl ring or heterocyclyl ring; or each  $Q^1$  is independently substituted or unsubstituted with one or more substituents each independently selected from  $Q^2$ ;

cach Q<sup>2</sup> is independently selected from halo, pseudohalo, oxo, thioxo, cyano, thioxyano, isocyano, nitro, azido, alkyl, haloalkyl, alkenyl containing 1 to 2 double bonds, alkynyl containing 1 to 2 triple bonds, cycloalkyl, cycloalkenyl, cycloalkynyl, cycloalkylalkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, aralkenyl, aralkynyl, heteroarylalkyl, alkylidene, arylalkylidene, aryloxyarylcarbonylamino, hydroxycarbonylalkylthio, halosulfonyl, -OR<sup>70</sup>, -SR<sup>70</sup>, -R<sup>60</sup>-C(J)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>70</sup>)C(J)R<sup>71</sup>, -OC(O)R<sup>71</sup>, -R<sup>60</sup>-N(R<sup>75</sup>)(R<sup>76</sup>), -P(R<sup>78</sup>)<sub>2</sub>, -P(O)(R<sup>78</sup>)<sub>2</sub>, -OP(O)(R<sup>78</sup>)<sub>2</sub>, -N(R<sup>70</sup>)S(O)<sub>2</sub>R<sup>71</sup>, -S(O)<sub>2</sub>R<sup>71</sup>, -S(O)<sub>2</sub>R<sup>83</sup>, oS(O)<sub>2</sub>R<sup>83</sup> or -Si(R<sup>83</sup>)<sub>3</sub>;

two  $Q^2$  groups, which substitute atoms in a 1,2 or 1,3 arrangement, together with the carbon atoms to which they are attached form a cycloalkyl ring, cycloalkenyl ring, cycloalkynyl ring or heterocyclyl ring;

each J is independently O, S or -NR<sup>70</sup>;

each R<sup>60</sup> is independently a direct bond or alkylene;

each  $\mathbb{R}^{70}$  is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl or heteroaralkyl;

each R<sup>71</sup> is independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, haloalkyl, heterocyclylalkyl, heteroaralkyl, -OR<sup>72</sup> or -N(R<sup>73</sup>)R<sup>74</sup>.

 $R^{72}, R^{73} \ and \ R^{74} \ are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or \\$ 

R<sup>73</sup> and R<sup>74</sup>, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

R<sup>75</sup> and R<sup>76</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaralkyl, heterocyclyl or heterocyclylalkyl; or

 $R^{75}$  and  $R^{76}$ , together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring:

each R<sup>27</sup> is independently alkyl, alkenyl, eyeloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R78 is alkyl, heteroaryl, heterocyclyl, aryl, -OR79 or -N(R80)R81:

 $R^{79}$  is hydrogen, alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

R<sup>80</sup> and R<sup>81</sup> are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl; or

R<sup>80</sup> and R<sup>81</sup>, together with the nitrogen atom to which they are attached, form a heterocyclyl ring or heteroaryl ring;

 $R^{82}$  is alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl, heteroaralkyl or -OR  $^{83}$  ; and

each R<sup>83</sup> is independently alkyl, alkenyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, aralkyl or heteroaralkyl;

as a single isomer, a mixture of isomers, or as a racemic mixture of isomers; or as a pharmaceutically acceptable salt thereof.

### 47. (Canceled)

48. (Previously Presented) A method of treating or ameliorating one or more symptoms of a disease or disorder wherein the disease or disorder is selected from hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, dyslipidemia, lipodystrophy, atherosclerosis, atherosclerotic disease, atherosclerotic disease events, atherosclerotic cardiovascular disease, Syndrome X, diabetes mellitus, type II diabetes, insulin insensitivity, hyperglycemia, cholestasis and obesity comprising administering to a subject in need thereof an effective amount of a compound or composition of any one claims 1-46.